

ABSTRACT

An in-plane magnetic recording medium comprises, on a substrate, a first underlying base layer of NiAl, a second underlying base layer of CrMo, a ferromagnetic atom-rich layer of CoPt, a magnetic coupling layer of Ru, a recording layer of CoCrPtB, and a protective layer of carbon. The magnetic coupling layer brings about exchange coupling force between the recording layer and the ferromagnetic atom-rich layer. The ferromagnetic atom concentration is high in the ferromagnetic atom-rich layer as compared with the recording layer. Therefore, the exchange coupling force, which is exerted between the ferromagnetic atom-rich layer and the recording layer, is remarkably improved. Accordingly, it is possible to provide a magnetic recording apparatus which is excellent in recording stability over a long period of time in which the thermal stability of the magnetic recording medium is excellent.